

**HEPATITIS C  
PROVIDER  
POCKET GUIDE**

**NATIONAL  
HEALTH CARE**  
*for the*  
**HOMELESS  
COUNCIL**

**2023**

## **THIS GUIDE IS BROUGHT TO YOU BY:**



Swope Health implemented a Hepatitis C treatment program in 2019 after witnessing a significant need in the community it serves. They continue to be dedicated to helping all persons have access to this life saving treatment.

**Developed by Dr. Rachel Melson, DNP, FNP-C  
Outreach Clinic Director, Swope Health**

## **IN COLLABORATION WITH:**



This resource was developed with support from the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award to the National Health Care for the Homeless Council for \$1,967,147 with 0 percent financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more info visit [HRSA.gov](https://www.hrsa.gov)

*This guide is dedicated to  
all who have lost their lives to Hepatitis C without  
access to treatment.*

*It is time for a change.*

***Together, we can eliminate Hepatitis C.***

Dr. Rachel Melson DNP, FNP-C

**swope** HEALTH 

# PREVENT

## HARM REDUCTION

**Harm reduction** is an evidenced-based approach that meets people where they are, uses patient-centered goals as a starting place for collaborative action, and works to reduce harms related to substance use and other health behaviors.

Examples: medication assisted treatment (MAT), syringe service programs & sharps disposal, drug checking programs (fentanyl test strips), safer sex & drug use supplies, overdose prevention & naloxone distribution

### Naloxone/Narcan Candidate Screening Questions\*

- Have you ever experienced an overdose?
- In the last year, have you used substances including a prescription medication for non-medical reasons or that was not prescribed to you?
- Are you taking a prescribed opioid or benzodiazepine?
- Have you recently left prison/correctional facility or a detox/rehab facility?
- Have you ever witnessed an overdose?
- Does someone in your home or care use drugs or have a substance use disorder?

#### Provider Considerations

- Is the person prescribed an opioid high dose (> 50 MME/day)?
- Is the patient at risk for returning to using a high dose of a substance they are no longer tolerant to?

**\*A yes to any of these questions warrants a naloxone prescription**

## RESOURCES

### NATIONAL HARM REDUCTION COALITION

[www.harmreduction.org](http://www.harmreduction.org)

- Resources on overdose prevention, syringe access, harm reduction trainings and implementation guides
- Hepatitis C and harm reduction intersection information

### PROVIDERS CLINICAL SUPPORT SYSTEM

[www.pcassnow.org](http://www.pcassnow.org)

- Trainings for primary care providers in evidence-based prevention and treatment of opioid use disorders and chronic pain

# TREAT

## KEY POPULATIONS

Certain populations have a higher burden and risk of transmission and acquisition of the Hepatitis C virus than the general population. Persons experiencing **homelessness**, persons who inject drugs (**PWID**), men who have sex with men (**MSM**), and persons with a history of **incarceration** experience unique risks and barriers when accessing healthcare, including Hepatitis C testing and treatment.

### RECOMMENDATIONS FOR PERSONS EXPERIENCING HOMELESSNESS:

- Every patient encounter should include a risk factor assessment and testing for HCV and HIV as indicated
- Primary care providers should treat Hepatitis C for patients experiencing homelessness unless referral is indicated given the severity of the disease
- Hepatitis C treatment should be individualized and include a model of shared decision making
- HCV care should be integrated to include harm reduction services, substance use treatment, behavioral health, and treatment of comorbidities or other co-occurring conditions
- Community partners (shelters, transitional living facilities, etc.) should be engaged in care coordination to assist patients in treatment completion
- Utilize peer education and peer advocates to reduce stigma and support engagement with treatment
- Address stigma and misinformation of HCV and treatment costs and perceived barriers to care with patients and community partners

### RECOMMENDATIONS FOR ALL AT RISK POPULATIONS:

- **Testing**
  - At least annual HCV testing is recommended
  - At least annual HCV-RNA testing is recommended for persons with continued risk factors like drug use after previous RNA testing
  - Test at initiation of HIV PrEP and at least annually
- **Risk Factors**
  - Counseling about measures to reduce the risk of HCV transmission to others, risk of reinfection, and measures to prevent HCV infection and transmission
  - PWID should be offered linkage to harm reduction services
- **Treatment**
  - Active or recent drug use or a concern for reinfection is **NOT** a contraindication to HCV treatment
  - All persons, regardless of current or on-going risk factors, should be offered HCV treatment and linked to care

# TEST

## UNIVERSAL SCREENING

- At least once in a lifetime for all adults aged 18 years and older
- All pregnant women during each pregnancy
- One-time screening regardless of age among people with recognized conditions or exposures:
  - HIV positive
  - History of injection drug use and shared needles, syringes, or other drug preparation equipment
  - People who ever received maintenance hemodialysis
  - People with persistently abnormal ALT levels
  - Prior recipients of transfusions or organ transplants before 1992
  - Healthcare, emergency, and public safety personnel after exposures to HCV-positive blood
  - Children born to mothers with HCV infection

## ROUTINE PERIODIC TESTING

- For people with ongoing risk factors, while risk factors persist:
  - People who currently inject drugs and share needles, syringes, or other drug preparation equipment
  - People who ever received maintenance hemodialysis
- Any person who requests hepatitis C testing should receive it, regardless of disclosure of risk, because many persons may be reluctant to disclose stigmatizing risks

## HCV TEST ORDERS

- HCV antibody with reflex to RNA
  - HCV antibody testing should not be tested without reflexive RNA unless it is for rapid testing
- Rapid/point of care antibody test
  - If **positive**, order a HCV RNA to verify if the patient requires treatment

## TEST INTERPRETATION

### ANTIBODY

### RNA

### TREATMENT

NEGATIVE

NEGATIVE

NOT INDICATED, ROUTINE PERIODIC SCREENING, REPEAT IN 6 MO IF CONCERN FOR RECENT EXPOSURE

**POSITIVE**

NEGATIVE

**POSITIVE**

**POSITIVE**

**TREATMENT INDICATED**

# EVALUATE

## PRETREATMENT ASSESSMENT

### Pretreatment Laboratory Testing

CBC, AST, ALT, albumin, total and direct bilirubin, eGFR, INR, Quant. HCV RNA, HIV, HBV surface antigen, HCG

FIBROSIS EVALUATION TOOL	SUSPECTED CIRRHOSIS FINDING
Noninvasive serologic tests	FibroSure, FibroTest, etc.: F4
Transient elastography	FibroScan stiffness >12.5 kPa
Fib-4 Calculation	>3.25
Clinical Evidence	Liver nodularity, PLT <150,000

$$\frac{\text{AGE} \times \text{AST}}{\text{PLT} \times \sqrt{\text{ALT}}} = \text{FIB-4}$$

> 3.25 is predictive of advanced cirrhosis

$$\frac{\frac{\text{AST}}{40}}{\text{PLT}} \times 100 = \text{APRI}$$

> 1.0 is predictive of cirrhosis

CTP Scoring				CTP Class
Points	1	2	3	
Encephalopathy	NONE	Grade 1-2	Grade 3-4	<b>A</b> = 5-6 points Least Severe
Ascites	NONE	Mild-Mod	Severe	<b>B</b> = 7-9 points Moderately Severe
Bilirubin	<2	2-3	>3	<b>C</b> = 10-15 points Most Severe
Albumin	>3.5	2.8-3.5	<2.8	
PT or INR	<4	4-6	>6	
	<1.7	1.7-2.3	>2.3	<b>Cirrhosis Severity</b>

## ULTRASOUND INDICATIONS

### CONCERN FOR HEPATOCELLULAR CARCINOMA OR CIRRHOSIS

- Low PLT (< 150)
- Elevated AFP
- Discordant results
- Elevated Fibrosis:
  - Stage F3 or F4
  - FIB-4 > 3.25 or APRI > 1.0

### SURVEILLANCE FOR HEPATOCELLULAR CARCINOMA

With elevated fibrosis stages (F3 & F4):

Ultrasounds should be checked **every 6 months** to screen for Hepatocellular Carcinoma and advanced liver disease

# TREAT

## TREATMENT CONSIDERATIONS

### Consider consultation or referral to higher level of care when:

- Co-Infection is present (Hepatitis B and/or HIV)
- History of organ transplant
- Decompensated cirrhosis is highly suspected
- Current pregnancy
- Known or suspected hepatocellular carcinoma

### Treatment is contraindicated when:

- Life expectancy is short and cannot be improved by HCV treatment, liver transplant, or other measures
- Patient is a child under age 3

## MEDICATION CONSIDERATIONS

### REVIEW MEDICATION LIST PRIOR TO TREATMENT FOR:

- **Statins or other cholesterol lowering agents**
  - May lead to an increased risk of rhabdomyolysis
- **Certain vitamins**
  - Excess iron intake without deficiency can promote hepatic injury
  - St. John's Wort should be avoided
- **Certain seizure medications**
  - Including carbamazepine, oxcarbazepine, phenobarbital, phenytoin
- **GERD/Acid suppressing medications**
  - Suppressing GI acidity can lead to DAAs being less effective
- **Warfarin**
  - Monitor INR for subtherapeutic anticoagulation
- **Diabetic Medications**
  - Monitor for hypoglycemia
- **Ethinyl Estradiol**
  - May lead to hepatotoxicity
- **Antiarrhythmics**
  - Amiodarone may lead to toxicity and bradycardia
- **Certain HIV medications**

*These are **not** all of the potential interactions and do not indicate that treatment is contraindicated with these medications.*

*For more information visit:*

[www.hep-druginteractions.org](http://www.hep-druginteractions.org)



# TREAT

## VACCINE RECOMMENDATIONS

### ALL PERSONS WITHOUT IMMUNITY TO HEP A & B:

#### Hepatitis A

- Harvix: 2 dose schedule (0 and 6-12 months) -or-
- Vaqta: 2 dose schedule (0 and 6-18 months)

#### Hepatitis B

- Engerix-B: 3 dose schedule (0, 1, and 6-12 months) -or-
- Recombivax HB: 3 dose schedule (0, 1, and 6-12 months) -or-
- Heplisav-B: 2 dose schedule (0, and 1 month)

#### Hepatitis A/B Combination

- Twinrix: 3 dose schedule (0, 1, and 6-12 months)

### ALL PERSONS WITH CHRONIC LIVER DISEASE:

#### PPSV23

- Age 19-64: 1 dose
- Age > 65: 1 dose at least 1 year after the PCV13 and at least 5 years after any prior dose

#### PCV13

- Age > 65: 1 dose

**Continue all other Routine Adult Vaccinations per schedule**

## DIRECT ACTING ANTIVIRALS

Direct-acting antivirals are inhibitors of the NS3/4A protease, the NS5A protein, and the NS5B polymerase. NS3/4A protease inhibitors are inhibitors of the NS3/4A serine protease, an enzyme involved in post-translational processing and replication of HCV.

MEDICATION	DOSING
<b>Mavyret</b> Glecaprevir (300 mg) - Pibrentasvir ( 120 mg)	100mg / 40mg tablets 3 tablets once daily
<b>Eplusa</b> Sofosbuvir (400 mg) - Velpatasvir (100 mg)	400 mg / 100 mg tablets 1 tablet once daily
<b>Harvoni</b> Ledipasvir (90mg) - Sofosbuvir (400 mg)	90 mg / 400 mg tablets 1 tablet once daily
<b>Zepatier</b> Elbasvir (50 mg) - Grazoprevir ( 100 mg)	50 mg / 100mg tablet 1 tablet once daily
<b>Vosevi</b> Sofosbuvir (400 mg) - Velpatasvir (100 mg) - Voxilaprevir (100 mg)	400 mg /100mg /100 mg 1 tablet once daily

# TREAT

## TREATMENT GUIDELINES

For up-to-date guidelines: <https://www.hcvguidelines.org>

### Simplified Treatment for Treatment-Naïve Adults Without Cirrhosis

#### Mavyret

Glecaprevir (300 mg) -  
Pibrentasvir (120 mg)  
for 8 weeks

OR

#### Epclusa:

Sofosbuvir (400 mg) -  
Velpatasvir (100 mg)  
for 12 weeks

### Treatment-Naïve Adults With Compensated Cirrhosis

#### Mavyret

Glecaprevir (300 mg) - Pibrentasvir (120 mg) for 8 weeks

*Epclusa is an option, however resistance testing may be necessary for genotype 3.*

## TREATMENT MONITORING

**After 4 weeks and at end of treatment:** PLT, AST/ALT, HCV RNA  
Assess for worsening of liver function and decrease in HCV RNA

Any patient with a **10-fold or greater increase in ALT levels** or with **symptoms suggestive of acute hepatic injury** and increases in ALT that are less than 10-fold should **discontinue therapy** with close monitoring and follow up for improvement.

### 12 Weeks Post-Treatment

**Lab Work:** HCV RNA (PLT, AST/ALT if previously abnormal)

**Vaccines:** Finish Hep A/B or B series

**Ultrasounds:** Ordered every 6 months for elevated fibrosis scores

**Education:** Re-exposure risk reduction, lifetime Hep C antibody presence, SVR/cure significance, HCC surveillance

### CURE = SVR

Sustained Virologic Response is an undetectable HCV RNA 12 weeks or later after the completion of DAA HCV treatment

# TREAT

## TREATMENT INTERRUPTIONS

### During First 28 days of DAA Treatment

- **Missed < 7 days:** restart DAA immediately and complete treatment
- **Missed > 8 days:** restart DAA immediately and check RNA
  - Negative RNA: complete treatment course as planned\*
  - Positive RNA or unable to obtain: extend DAA treatment by 4 additional weeks

### After 28 days of DAA Therapy

- **Missed < 7 days:** restart DAA immediately and complete treatment
- **Missed 8-20 consecutive days:** restart DAA immediately and check RNA
  - Negative RNA: complete treatment course as planned\*
  - Positive RNA or unable to obtain: extend DAA treatment by 4 additional weeks
- **Missed >21 consecutive days:** Stop DAA treatment and assess SVR in 12 weeks; retreat if RNA is positive

*\*Extend DAA for 4 weeks in genotype 3*

## RETREATMENT INDICATIONS

### Sofosbuvir-Based Treatment Failure

#### Vosevi

Sofosbuvir (400 mg) -Velpatasvir (100 mg) -Voxilaprevir (100 mg)  
400 mg /100mg /100 mg once daily for 12 weeks

### Glecaprevir/Pibrentasvir Treatment Failure Without Compensated Cirrhosis

#### Vosevi

Sofosbuvir (400 mg) -Velpatasvir (100 mg) -Voxilaprevir (100 mg)  
400 mg /100mg /100 mg once daily for 12 weeks

#### With Compensated Cirrhosis

Vosevi + weight-based ribavirin for 12 weeks

**REINFECTION** is rare.

However, it requires **re-treatment**.

Unless there is suspicion for previous treatment failure, patient should be retreated as if they are treatment-naïve and based on their current lab and physical exam findings.

# TREAT

## PROVIDER SUPPORT

### HEPATITIS C ONLINE

[www.hepatitisc.uw.edu](http://www.hepatitisc.uw.edu)

- Education on HCV diagnosis, monitoring, and management
- Includes information on HCV biology and medications
- Clinical Calculators/Tools: CTP, FIB-4, APRI; CAGE, AUDIT-C
- CE/CME available

### MO VIRAL HEPATITIS ECHO

[www.showmeecho.org/clinics/hepatitis-c](http://www.showmeecho.org/clinics/hepatitis-c)

- Provides collaboration, support and ongoing learning with HCV experts
- Sessions include didactic education and participant case studies/questions
- CE/CME available

### NATIONAL CLINICIAN CONSULTATION CENTER

[www.nccc.ucsf.edu/clinician-consultation/hepatitis-c-management](http://www.nccc.ucsf.edu/clinician-consultation/hepatitis-c-management)

- Consultation for treatment decision-making and management of co-morbidities, complications, and special populations
- Warm-line: (844) 437-4636
- Monday – Friday, 9 a.m. – 8 p.m. ET

### PROJECT HEP CURE

[www.dss.mo.gov/mhd/hepc](http://www.dss.mo.gov/mhd/hepc)

- Information about treating MO HealthNet participants for HCV

### MO DEPARTMENT OF HEALTH & SENIOR SERVICES

[www.health.mo.gov/living/healthconditions/diseases/communicable/hepatitic](http://www.health.mo.gov/living/healthconditions/diseases/communicable/hepatitic)

- Recommendations and resources for screening and treating HCV
- Viral hepatitis epidemiologic profile & fact sheets

### ADDITION TECHNOLOGY TRANSFER NETWORK

<https://attcnetwork.org/centers/global-attc/hcv-current-initiative>

- Resources for integrating HCV treatment in Opioid Treatment Programs or treating persons with HCV and substance use disorders

### NATIONAL VIRAL HEPATITIS ROUNDTABLE

<https://nvhr.org/resources/>

- Resources for navigating treatment access barriers, provider and patient toolkits, and advocacy efforts

## UNINSURED ASSISTANCE

### AbbVie: myAbbVie Assist

Medication: Mavyret

[www.abbvie.com/patients/patient-assistance](http://www.abbvie.com/patients/patient-assistance)

### Gilead: Support Path

Medications: Epclusa, Vosevi, Harvoni, Solvadi

[www.mysupportpath.com](http://www.mysupportpath.com)

# TREAT

## PRIOR AUTHORIZATIONS

### State Medicaid Programs

- Information for state Medicaid requirements and their grades can be found at: [www.stateofhepc.org](http://www.stateofhepc.org)
- State grades are based on:
  - Liver damage restrictions
  - Sobriety restrictions
  - Prescriber restrictions

### Medicare & Other Insurances

- Most will require a PA
- Most will require genotyping and fibrosis scoring
- PA application assistance:
  - [www.covermymeds.com](http://www.covermymeds.com)
  - [www.hcp.iassist.com](http://www.hcp.iassist.com)
  - [www.surescripts.com](http://www.surescripts.com)
  - [www.abbvieushc.force.com](http://www.abbvieushc.force.com)

## CO-PAY & PREMIUM ASSISTANCE

### My Good Days

Insurance Type: Medicare or Military  
Amount: up to \$15,000  
Income: Below 500% FPL  
[www.mygooddays.org](http://www.mygooddays.org)

### HealthWell Foundation

Insurance Type: Any  
Amount: up to \$30,000  
Income: 400 - 500% FPL  
[www.healthwellfoundation.org](http://www.healthwellfoundation.org)

### Patient Access Network

Insurance Type: Any  
Amount: up to \$6,800  
Income: Below 500% FPL  
[www.panfoundation.org](http://www.panfoundation.org)

### Patient Advocate Foundation

Insurance Type: Any  
Amount: up to \$15,000  
Income: Below 400% FPL  
[www.patientadvocate.org](http://www.patientadvocate.org)

## CO-PAY COUPONS

### Epclusa

Coverage: \$5 per monthly prescription  
Max of 25% of catalog price  
[www.epclusa.com/sign-up-eligibility](http://www.epclusa.com/sign-up-eligibility)

### Vosevi

Coverage: \$5 per monthly prescription  
Max of 25% of catalog price  
[www.vosevi.com/co-pay-coupon-registration](http://www.vosevi.com/co-pay-coupon-registration)

### Mavyret

Coverage: \$5 per monthly prescription  
[www.mavyret.com/savings-card](http://www.mavyret.com/savings-card)

### Harvoni

Coverage: \$5 per monthly prescription  
Max of 25% of catalog price  
[www.harvoni.com/support-and-savings/co-pay-coupon-registration](http://www.harvoni.com/support-and-savings/co-pay-coupon-registration)

